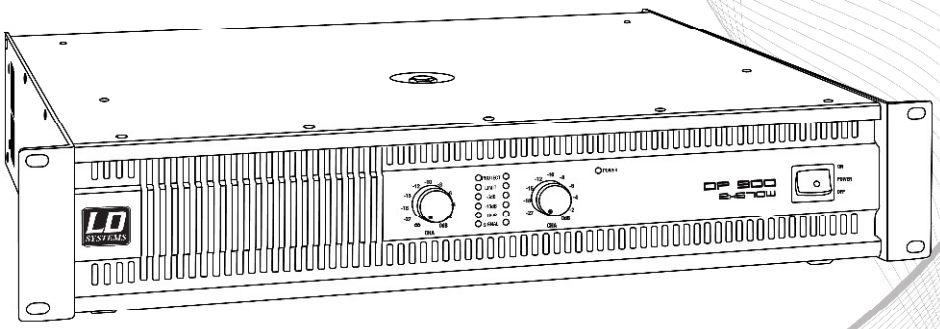
USER´S MANUAL
BEDIENUNGSANLEITUNG
MANUEL D`UTILISATION
MANUAL DE USUARIO
INSTRUKCJA OBSŁUGI



LD **DEEP**^{2} SERIES

DYNAMIC EFFICIENT ENGINEERED POWER AMPS

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Thank you for choosing LD-Systems!

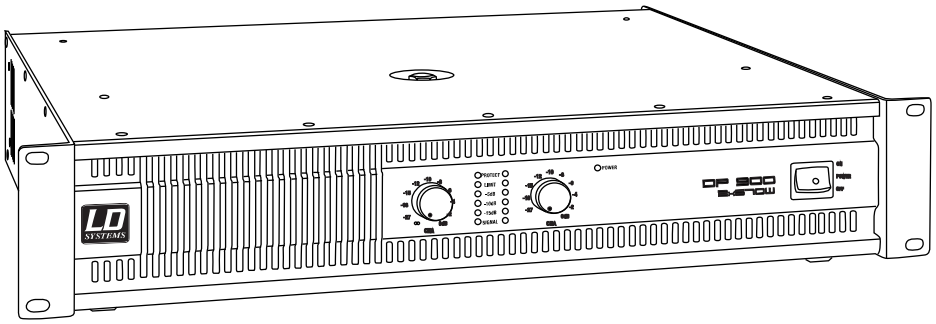
We have designed this product to operate reliably over many years. Therefore LD-Systems guarantees for high quality products with its name and many years of experience as a producer.

Please, take a few moments to read these instructions carefully, as we want you to enjoy your new LD-Systems products quickly and to the fullest.

For information about LD-Systems check out our website WWW.**LD-SYSTEMS.**COM

LD **DEEP²** SERIES

DYNAMIC EFFICIENT ENGINEERED POWER AMPS



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PREVENTIVE MEASURES:

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1. Please read the attached safety instructions as well as the following instructions carefully.
2. Please keep all the instructions.
3. Please use the device only as intended.
4. Please respect the valid waste management rules. Please deliver the packaging divided into plastic and paper/ cardboard to the recycling management.
5. Please refer all servicing to qualified personel only if the device is damaged, exposed to liquid/rain or if it does not operate normally.
6. Please, do not expose to any kind of heat such as ovens, radiators, or any other devices (incl. amplifiers). Please check for enough distance between amplifiers and walls, racks, etc. to prevent overheating.
7. After connection please check the wiring to prevent any kind of accident or damage. Please never use any kind of damaged cable and wiring.
8. Only use authorized and stable stands, brackets, shelfs, tables etc.. for installations. Please check for adequate stability against collapse.
9. Please check operating voltage before connecting. Wrong voltage will damage your device.

CAUTION:

To reduce the risk of electric shock, do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified personnel.

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product´s enclosure that may be of sufficient magnitude to constitute a risk to persons.

The exclamation mark within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

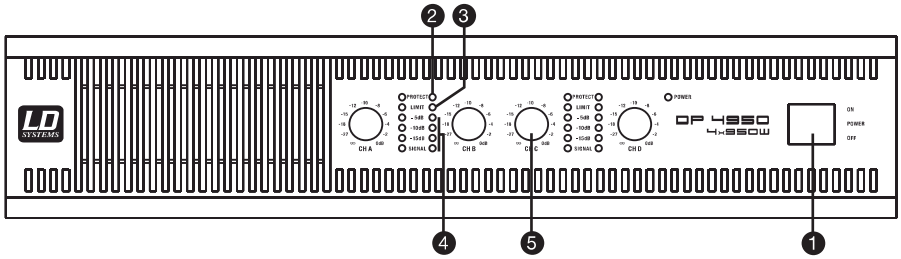
CAUTION! HIGH VOLUME!

You will operate this system for professional use. Therefore the commercial use of this equipment is liable to the rules and regulations of the Accident Prevention & Insurance Association of your industry sector. Adam Hall as a manufacturer is bound to inform you formally about the existence of eventual sanitary risks.

These speakers are able to induce high acoustic sound pressure levels. 85 db is by law the maximum audio pressure level which your ear can be exposed to during a work day. It was set according to the technical expertise of the occupational medicine as a basis for the noise rating level. Higher sound levels or longer exposition times could damage your ear. The time of exposition by higher sound pressure levels should be shortened in order to prevent from ear damages. Here are a few reliable warning signals which show that you have exposed yourself for a too long period to excessive sound pressure levels:

- You hear bell- or whistling sounds!
- You have the impression that you can’t hear high tones anymore!

FRONT PANEL:



❶ POWER SWITCH
Press to toggle the power on or off.

❷ PROTECT
By overheat or when DC is occured at power amp blocks, Protection cirquit is activated and „Protect“ -LED turns red. The protection cirquit and LED is always activated for 3 seconds after you turn the amplifier on.

❸ LIMIT
Lights up orange when the limiter ist working, because the signal level is too high. In this case lower the Gain.

❹ SIGNAL LED
Normal indication: The Signal indicator illuminates when the input signal exceeds -35dB, the -15dB indicator illuminates when the signal exceeds -15dB, the -10dB indicator illuminates when the signal exceeds -10dB, the -5dB indicator illuminates when the when the signal exceeds -5dB.

If no indication: check gain settings and increase gain if necessary. Check input connections and audio source for signal.

Abnormal indication: if -20dB, -15dB, -10dB, -5dB LED illuminates with no signal input, there may be system oscillations or some other malfunction. Disconnect the load and fully reduce the gain. If the LED remains on , the amp may need servicing.

❺ GAIN CONTROLS
Turn the gain controls clockwise to increase gain and counter clockwise to decrease gain.

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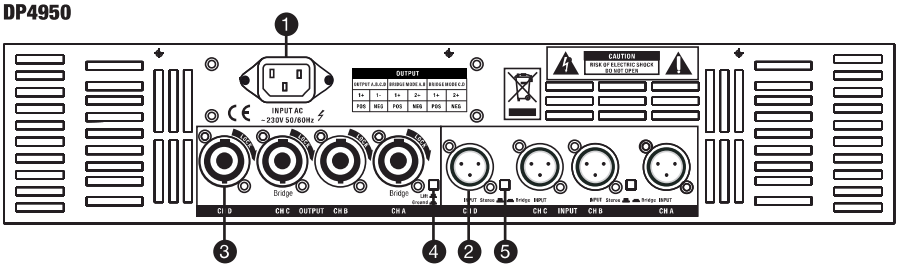
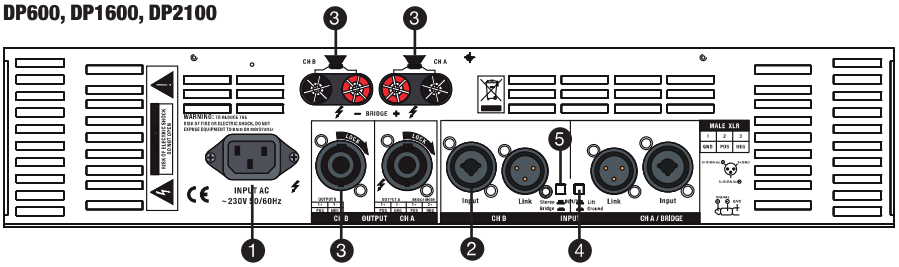
BACK PANEL:

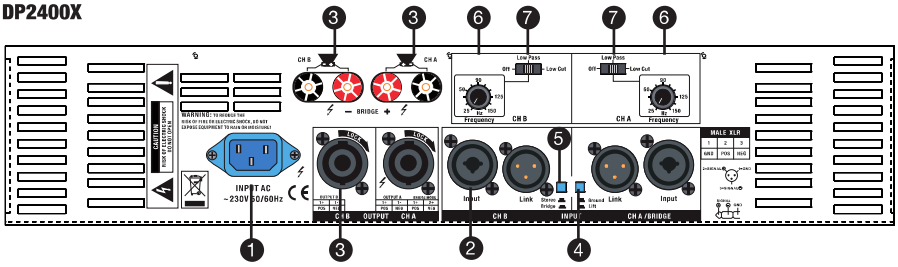
DP4950

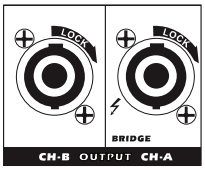


DP600, DP1600, DP2100

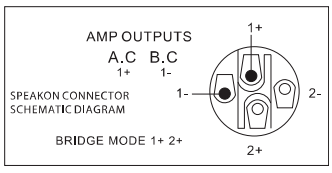


DP2400X

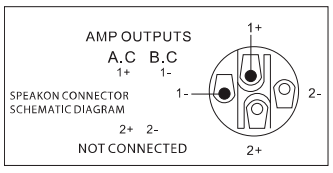




KANAL A



KANAL B



BACK PANEL:

❶ MAIN SOCKET
Please, make sure that the mains voltage of the amplifier matches the local mains supply.
An appropriate mains cord is included.

❷ INPUT
The XLR/TRS COMBI-type connector inputs INPUT A, B, (C, D on DP4950) are connect to mixing console or other source. The XLR-type connectors LINK A, B, (NOT excisting on DP4950) are prepared for through-connecting input signals to additional external power amps. The input signal is directly routed to these output connectors, even if power is switched off.

AUDIO CONNECTION CABLES
Choosing high-quality balanced cables (two conductors for the audio + and - signal plus sepearate shielding screen) with XLR-type connectors is recommended. Although connecting unbalanced cables to the power amplifier inputs is possible as well, using balanced cables is always preferable. A great number of today´s audio applications uses balanced outputs. With balanced cables, the shield connects all metal chassis parts and therefore efficiently eliminates the external interference -mostly noise and hum.

❸ OUTPUTS
Speakon and Binding post -type loudspeaker connectors. The Speakon connector is designed specially for high-power speaker connections. It locks in place, prevents shock hazard, and assures the correct polarity.

SPEAKER CABLING
Larger wire sizes and shorter lengths minimize both loss of power and degradation of damping factor. Do not place speaker cables next to input wiring. Please take care when binding posts are used, that there comes no possibility to short cirquit from loosen cables.

❹ SELECTING GROUND SWITCH
Ground lift means breaking a connection between chassis earth and electrical earth. Use this feature only when 50Hz hum is excisting from loudspeakers.

❺ SELECTING STEREO / BRIDGE MODE

STEREO MODE
Each channel within the pair remains independent, and each may be used for a different signal.

BRIDGE MODE
This setting combines both channels of a pair into a single channel with twice the output voltage. Use only the input and gain control channel A. Set the channel B gain control at minimum.

BACK PANEL / CONNECTION:

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FREQUENCY FILTER FUNCTION (DP2400X)

❻ FILTER FREQUENCY 25-150 Hz

❼ FILTER SWITCH
OFF: Filter off
Low Pass: For use as variable Low-Pass Filter. Frequencies higher than the adjusted frequency will be cut off.
Low Cut: For use as variable Low-Cut Filter. Frequencies lower than the adjusted frequency will be cut off.

To use the DP2400X as an active 2-Way amplifier, combine both filters as a crossover.

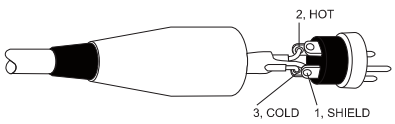
CONNECTION

LF - CONNECTION CORDS

For best result please choose high quality balanced XLR cables.
Integrated XLR / 6,3 mm Phone jack combo input connectors offer the opportunity to connect also unbalanced mixing consoles by using 6,3 mm phone jack cables.

XLR-type connector pin-assignment

XLR (male)



XLR (female)

SPECIFICATIONS:

MODEL	DP600	DP1600	DP2100	DP4950	DP2400X
Output Power @1 kHz					
2 Ω	2 x 300 W	2 x 800 W	2 x 1050 W	-	2 x 1200W
4 Ω	2 x 400 W	2 x 650 W	2 x 810 W	4 x 810 W	2 x 950 W
8 Ω	2 x 300 W	2 x 450 W	2 x 560 W	4 x 490 W	2 x 600 W
Bridge 4 Ω	600 W	1600 W	2100 W	-	2200 W
Bridge 8 Ω	800 W	1300 W	1620 W	2 x 1600 W	1800 W
Output Circuity:	Class H	Class H	Class H	Class H	Class H
Frequenzy Range:	20 Hz - 20 kHz	20 Hz - 20 kHz	20 Hz - 20 kHz	20 Hz - 20 kHz	20 Hz - 20 kHz
THD:	< 0.1 %	< 0.1 %	< 0.1 %	< 0.1 %	< 0.1 %
S/N Ratio:	105 dB	106 dB	106 dB	105 dB	106 dB
Damping Factor:	> 400	> 400	> 450	> 400	> 450
Crosstalk:	> 80 dB	> 80 dB	> 80 dB	> 70 dB	> 76 dB
Voltage Gain:	35 dB	38 dB	39 dB	38 dB	39 dB
Input Sensitivity:	0.775 V	0.775 V	0.775 V	0.775 V	0.775 V
Input Impedance:	>20 kOhm	>20 kOhm	>20 kOhm	>20 kOhm	>20 kOhm
Protection:	DC, Temp, Short circuit, Over current				
Controls:	On/Off, 2x (4x) Volume, Ground lift, Bridge/Stereo				
Indicators:	Power, Signal, Level, Limit, Protect				+ Frequency Filter 12 db/oct
Connectors:	Input: XLR-6,3mm-Combi jack/Link output: XLR/Output: SPKn-Binding post/AC Input: Volex power plug				
Cooling System:	High efficiency, two speed fan				
Power Supply:	AC ~ 230V / 50-60 Hz				
Power Consumption @ Full Load:	6.0 A	11.0 A	15.0 A	19.0 A	16.0 A
Dimension W x H x D (mm):	483 x 88 x 350	483 x 88 x 350	483 x 88 x 350	483 x 88 x 350	483 x 88 x 350
Weight (kg):	14,5	14,5	16,5	19,5	17,6

Since all our products are constantly controlled and improved, technical changes are possible without prior notice.

MANUFACTURER´S DECLARATIONS:

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LIMITED **WARRANTY**

This Limited Warranty applies to the Adam Hall, LD Systems, Defender, Palmer and Eminence branded products.

The statutory warranty rights towards the seller are not affected by this guarantee. In fact, it justifies, additional independent warranty claims towards Adam Hall.

Adam Hall warrants that the Adam Hall product you have purchased from Adam Hall or from an Adam Hall authorized reseller is free from defects in materials or workmanship under normal use for a period of 2 or 5 years from the date of purchase.

The Limited Warranty Period starts on the date of purchase. In order to receive warranty services you are required to provide proof of the purchase date. Your dated sales or delivery receipt, showing the date of purchase, is your proof of the purchase date. Should products of the brands named above be in need of repair within the limited warranty period, you are entitled to warranty services according to the terms and conditions stated in this document.

This Limited Warranty extends only to the original purchaser of this Adam Hall branded product and is not transferable to anyone who obtains ownership of the Adam Hall branded product from the original purchaser. During the Limited Warranty Period, Adam Hall will repair or replace the defective component parts or the product. All component parts or hardware products removed under this Limited Warranty become the property of Adam Hall.

In the unlikely event that your Adam Hall product has a recurring failure, Adam Hall, at its discretion, may elect to provide you with a replacement unit of Adam Hall´s choice that is at least equivalent to your Adam Hall branded product in hardware performance.

Adam Hall does not warrant that the operation of this product will be uninterrupted or error-free. Adam Hall is not responsible for damage that occurs as a result of your failure to follow the instructions included with the Adam Hall branded product.

This Limited Warranty does not apply,
- to wear parts (e.g. accumulator)
- to any product from which the serial number has been removed or that has been damaged or rendered defec tive as the result of an accident
- in case of, misuse, abuse, or other external causes
- by operation outside the usage parameters stated in the user´s documentation shipped with the product
- by use of spare parts not manufactured or sold by Adam Hall
- by modification or service by anyone other than Adam Hall

These terms and conditions constitute the complete and exclusive warranty agreement between you and Adam Hall regarding the Adam Hall branded product you have purchased.

MANUFACTURER´S DECLARATIONS:

LIMITATION OF **LIABILITY**

If your Adam Hall branded hardware product fails to work as warranted above, your sole and exclusive remedy shall be repair or replacement. Adam Halls' maximum liability under this limited warranty is expressly limited to the lesser of the price you have paid for the product or the cost of repair or replacement of any hardware components that malfunction in conditions of normal use.

Adam Hall is not liable for any damages caused by the product or the failure of the product, including any lost profits or savings or special, incidental, or consequential damages. Adam Hall is not liable for any claim made by a third party or made by you for a third party.

This limitation of liability applies whether damages are sought, or claims are made, under this Limited Warranty or as a tort claim (including negligence and strict product liability), a contract claim, or any other claim. This limitation of liability cannot be waived or amended by any person. This limitation of liability will be effective even if you have advised Adam Hall of an authorized representative of Adam Hall of the possibility of any such damages. This limitation of liability however, will not apply to claims for personal injury.

This Limited Warranty gives you specific legal rights. You may also have other rights that may vary from state to state or from country to country. You are advised to consult applicable state or country laws for a full determination of your rights.

REQUESTING **WARRANTY-SERVICE**

To request warranty service for the product, contact Adam Hall or the Adam Hall authorized reseller from which you purchased the product.

EC DECLARATION OF CONFORMITY

These devices meet the essential requirements and further relevant specifications of Directives 2004/108/EC (EMC) and 2006/95/EC (LVD). For more information, see www.adamhall.com.

CORRECT DISPOSAL OF THIS PRODUCT (ELECTRICAL WASTE)

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details on where and how they can recycle this item in an enviromentally friendly manner.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

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WEEE-DECLARATION

Your LD-Systems product was developed and manufactured with high quality materials and components wich can be recycled and/or reused. This symbol indicates that electrical and electronic equipment must be disposed of separately from normal waste at the end of its operational lifetime.
Please dispose of this product by bringing it to your local collection point or recycling centre for such equipment. This will help to protect the environment in which we all live.

BATTERIES AND ACCUMULATORS

The supplied batteries or rechargeable batteries can be recycled. Please dispose of them as special waste or return them to your specialist dealer. In order to protect the environment, only dispose exhausted batteries.

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